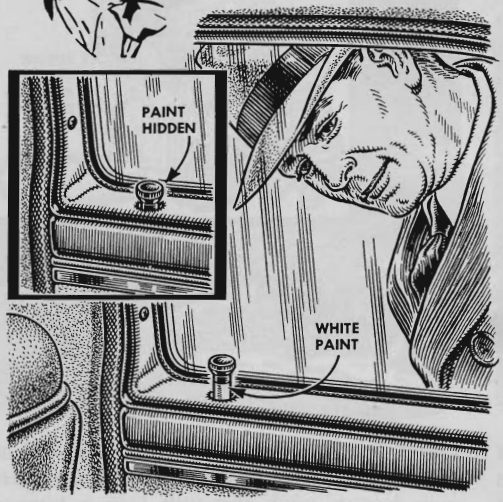
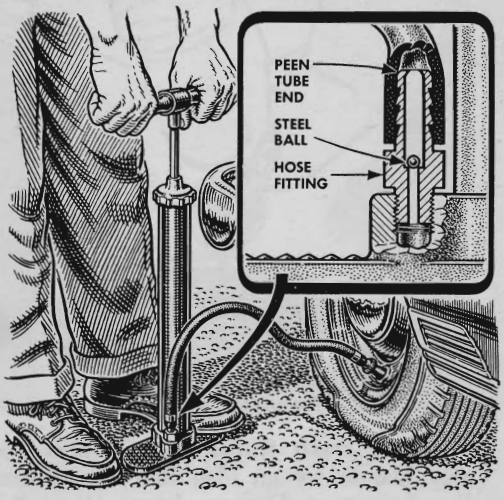
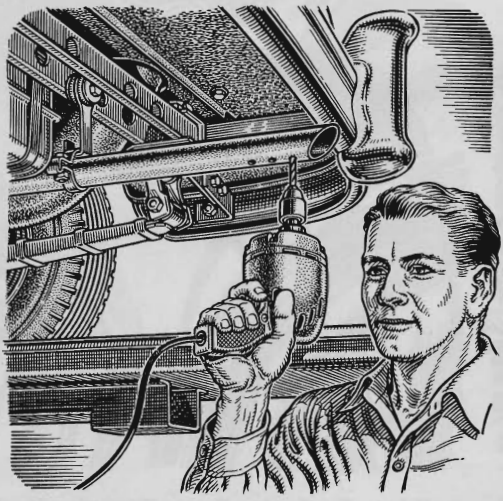
Hints from the Model Garage



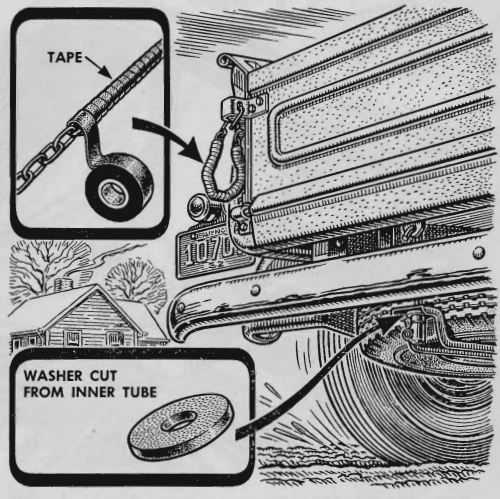
Paint Shows Button Position. From a distance it is sometimes difficult to tell whether car-door lock buttons are up or down. To remedy this, pull them up and paint a white strip around the base. If strip doesn't show, the door is locked.



Ball Check Speeds Tire Pumping. An ordinary tire pump may be hard to use if air leaks back from the tire. David R. Fay of Buffalo overcame this by installing a ball check. The ball used was obtained from an old bicycle-wheel bearing.



Drilled Holes Drain Tailpipe. You can retard corrosion of a tailpipe by drilling three 3/16″ holes 1″ apart at the exhaust end, as shown here. The holes will give condensed water a better chance to drain out of the pipe.

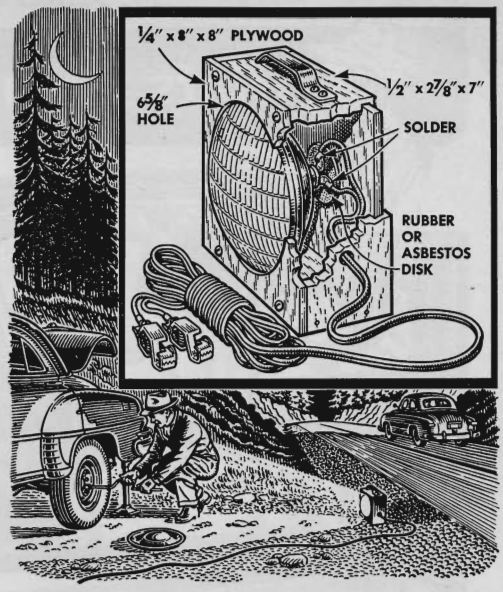


Curbing Truck Noises. Tail-gate chains on a trailer or light truck can be silenced by winding them with tape. If a spare-tire lock like the one shown rattles because of play between the lock and receptacle, insert a rubber washer to take up slack.

Please turn the page for four more auto hints.

MORE Hints from the Model Garage

Painting Dash Bulbs Cuts Glare. You may like to try an idea that comes from Jim Larson of Dayton, Iowa. He pulled out all light bulbs on the dash of his '47 Chevvy, dipped them in green paint, dried them under a heat lamp and put them back. This cuts glare when they are on full and produces a new-model lighting effect.

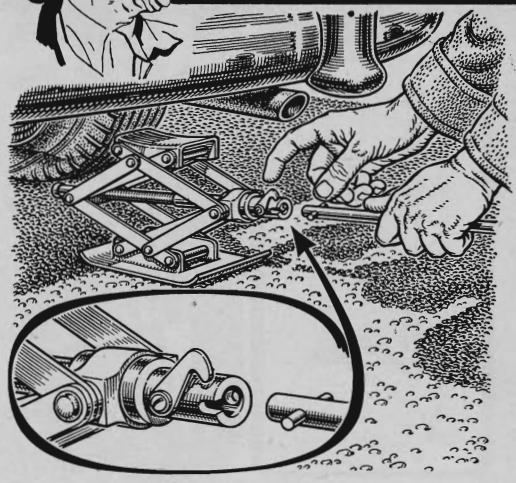


Lamp for Roadside Emergencies. When one beam of a sealed-reflector headlamp goes kaput, pack the unit into a box and carry it for night tire-changing and such. Test the three prongs on the back of the lamp to find which two give light. Solder a 15′ lead to these. Clamp lamp between box front and the rubber disk.

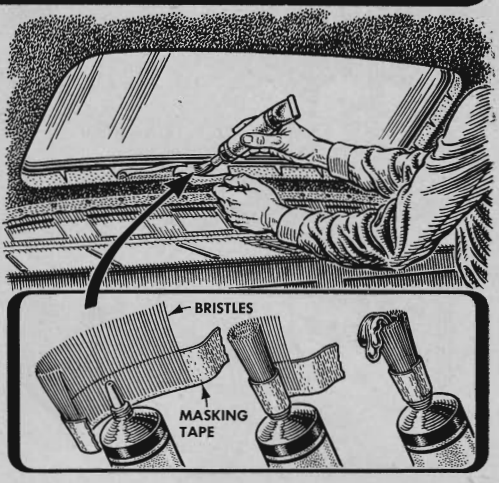
Plastic Bottle Cleans Windows. Refilled with window-cleaning fluid, a flexible-plastic bottle is a handy item to carry in the glove compartment. Empty bottles of this type can sometimes be bought in a drug or dime store.

Calking Protects Eave Trough. If the original calking falls out of the eave-trough joint on your car, replace it with knife-grade compound and paint the compound a matching color. Water will collect in seams left open, causing rust.

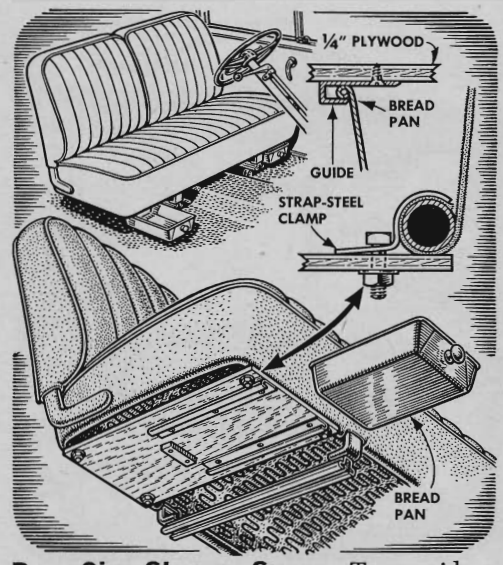
Hints from the Model Garage



Hook Locks Jack Handle. On the usual scissors jack, the handle cross pin has an annoying habit of slipping out. A hook like this will lock the handle in place. Tighten the screw so friction keeps the hook closed while the handle turns.



Tube Brush Spreads Cement. In applying head linings, G. E. Gannaway, Chattanooga, puts cement on with an attached brush made from paintbrush bristles. A nail inserted into the tube keeps the cement from drying out while stored.

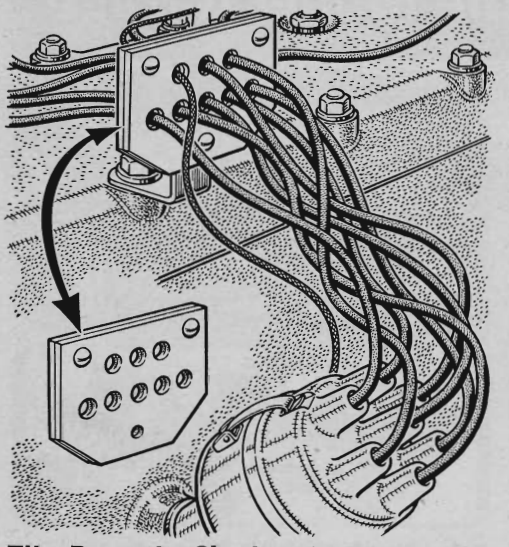


Pans Give Storage Space. To provide a place for small tools, Gladden Houck Jr., Port Chester, N. Y., installed bread pans under the seat of his Henry J. Pans 2¾" by 5¾" by 9¾" fit nicely. The pan edges slide in guides made from J-shaped tileboard molding, widened a bit by driving in drill rod.

Bracket Holds Extinguisher. A can-type fire extinguisher mounted behind the dash like this can be pulled out in a hurry. The bracket is formed from two storm-sash eyes. Put them in a vise and bend as shown, making a hook on the end of one. A heavy rubber band will then keep the extinguisher in position.

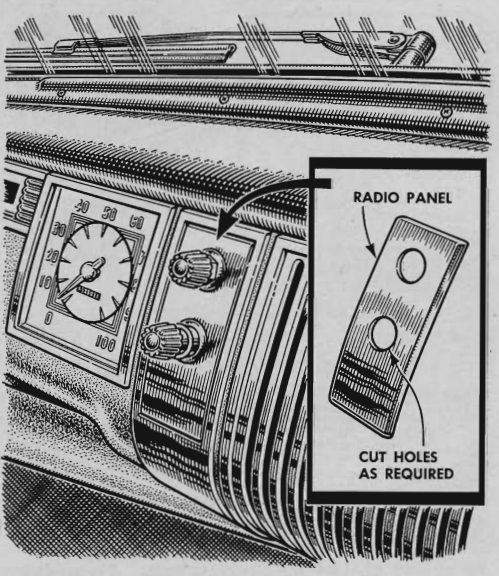
Please turn the page for four more hints.

MORE Hints from the Model Garage

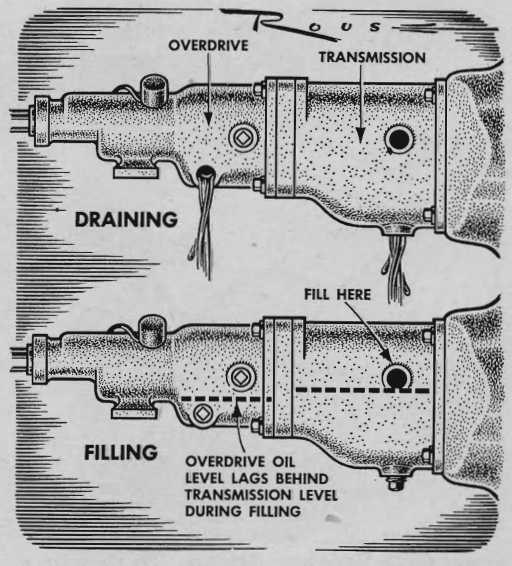


Tile Prevents Shorts. An ignition-wire support can be made from two layers of compressed floor tile. Since the tile is an insulator, this is less likely than a metal bracket to cause shorts if insulation wears.

Cords Control Garage Light. In an attached garage that has a light switch only at the house entrance, a cord arranged like this will enable you to turn the light on or off from the garage door.

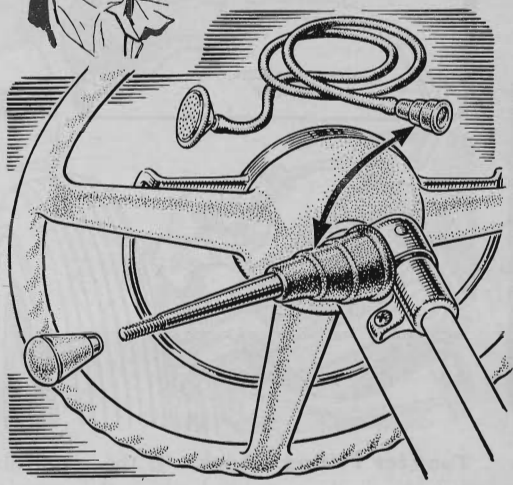


Put Radio Panel to Work. If your car has no radio, you can use the blank panel as a mounting place for accessory switches that you add to the car. Remove the panel and drill or cut out necessary holes. Carefully done, this will look better than switches simply clamped under the dash.

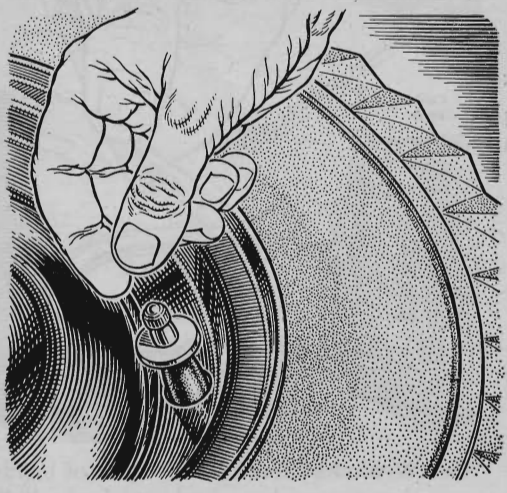


Fill Overdrive Slowly. In some overdrive units, the fill plug is lower than the transmission fill plug. Hence, to get enough lubricant into both units the lubricant should be pumped into the transmission and allowed to flow into the overdrive. Do this slowly so the overdrive has time to fill up.

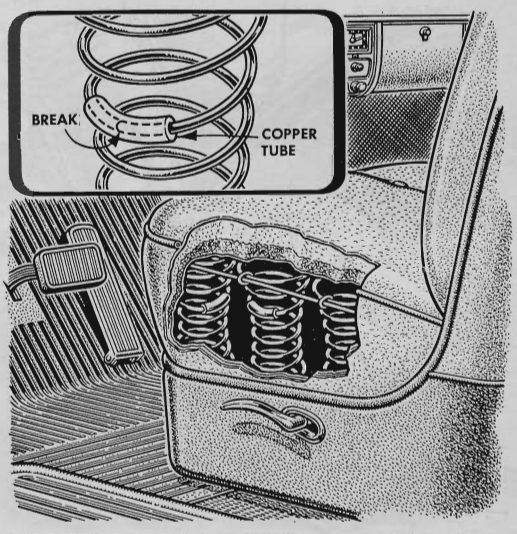
Hints from the Model Garage



Quieting a Gear Lever. In some older cars, a rattling shift lever on the steering post can be quieted by slipping on one of the rubber hose fittings that come with bathtub sprayers. Force it over the lever and against the steering column.



Washer Keeps Stem in Sight. If you have trouble preventing the valve stem from slipping back into the casing while mounting a tire, put a close-fitting washer on the stem and clamp it in place by screwing on the valve cap.

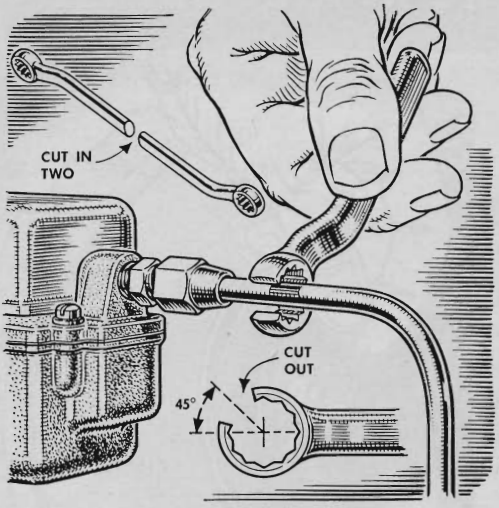


Repairing a Seat Spring. A coil spring in a car seat may break and let you down. But you can return the spring to service by forming a short piece of copper tubing to the contour of the spring and slipping it on the broken ends.

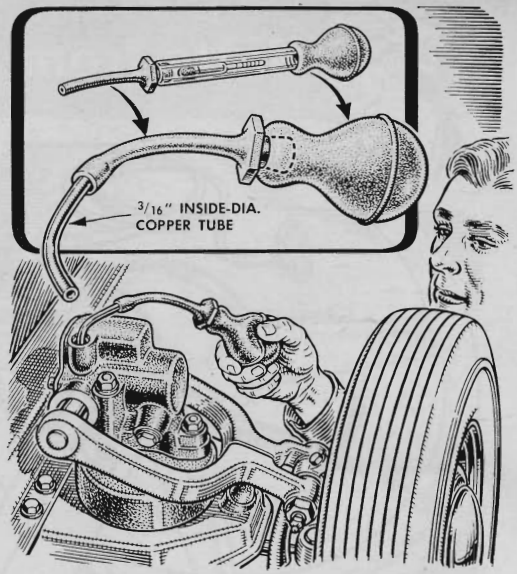
Hood Pad Protects Spotlight. If your spotlight swings to a position where the opened hood will strike it, pad the hood edge with a strip of rubber cemented in place. The hood then won't cause any damage if it accidentally hits the spot.

Please turn the page for four more auto hints.

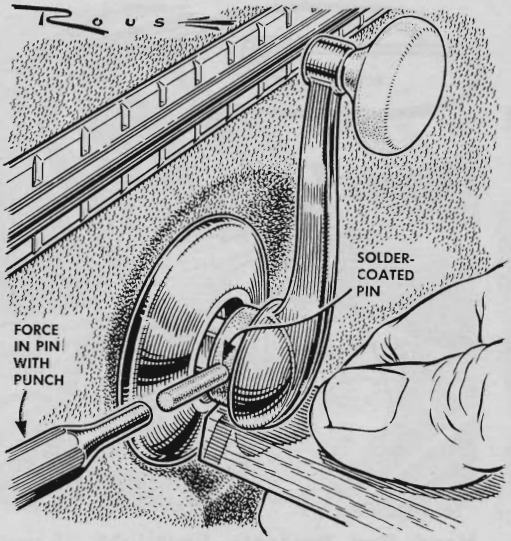
MORE Hints from the Model Garage



Two Wrenches from One. A pair of handy wrenches for work on fuel and brake lines can be made from a suitable-size box wrench. In each box, file a slot slightly larger than the tubing. The box will then slip down over the connecting nut. Cutting through the handle gives two short wrenches suited to work in tight spots.



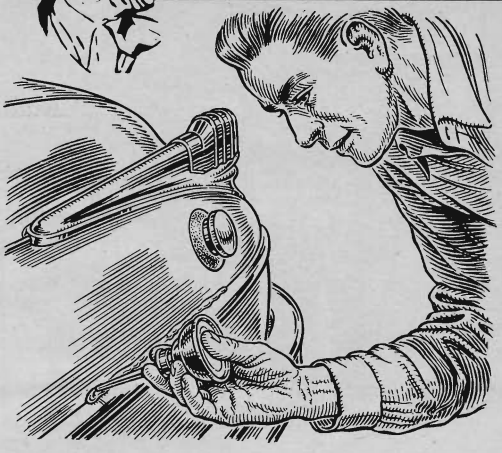
Tool for Filling Shocks. If the glass tubing of a hydrometer is broken, the remaining parts can be salvaged to make a tool for filling hard-to-reach shock absorbers. Slip the rubber unit from the tube bottom into the squeezing bulb. Force a short piece of copper tubing about ¾" into the rubber hose.



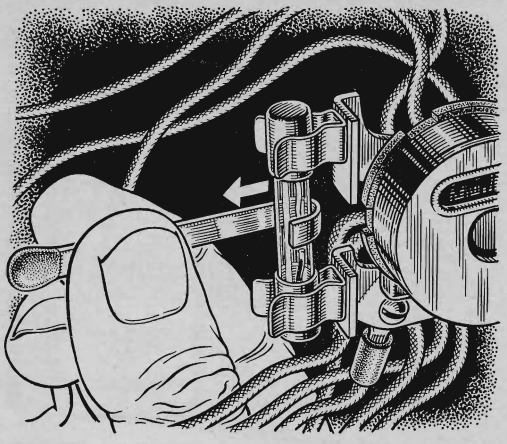
Solder Keeps Door Pin Snug. On most cars, a small pin holds each window crank in place. If a pin keeps falling out, dip it into molten solder for an instant. Then file or grind it down until it can just be forced into place.

Battery Clamp Easier to Remove. A couple of fiber washers placed between the nut and clamp when you connect a battery cable should make the cable easier to remove later. The washers will help keep corrosion from freezing the nut to the clamp.

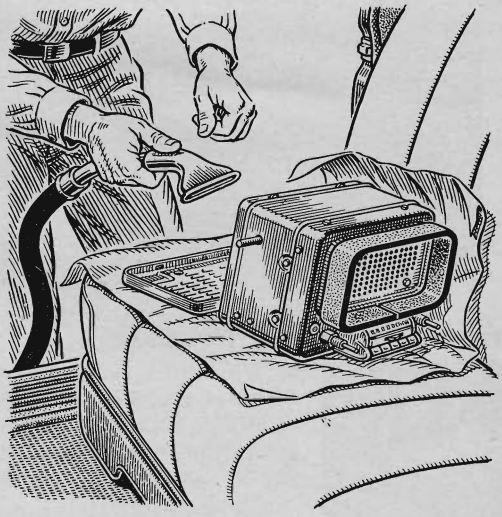
Hints from the Model Garage



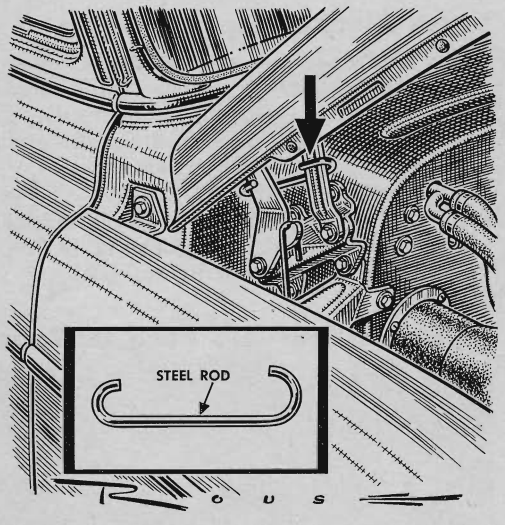
Oil Prevents Hidden Rust. On some cars, moisture is trapped under the trim and molding strips, causing rust to form. Motor oil applied to such places every six months will help prevent the rust. Wipe off surplus oil to keep dirt from collecting.



Hook Removes Fuse. Because it usually is difficult to get your fingers on a fuse, Howard Van DeWater, Kew Gardens, N. Y., suggests that garage workers make up a fuse hook. The one shown was bent to shape from a discarded wiper arm.



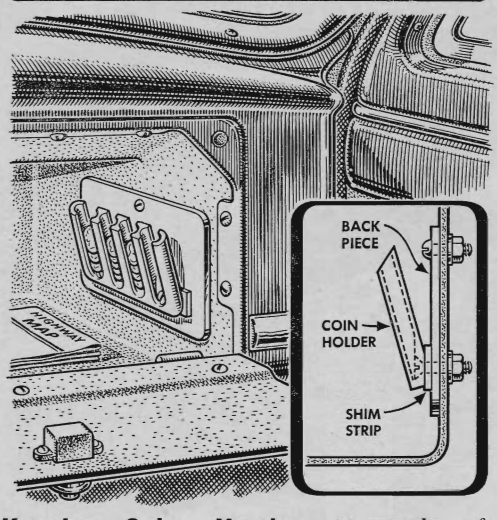
Dust May Knock Out Radio. One car manufacturer has traced a number of radio failures to dust blown behind the instrument panel by mechanics using an air hose to clean a car. If your radio has been subject to such whirlwinds, remove it and suck out the dust with a vacuum cleaner. Dust in the tuner lubricant also causes binding.



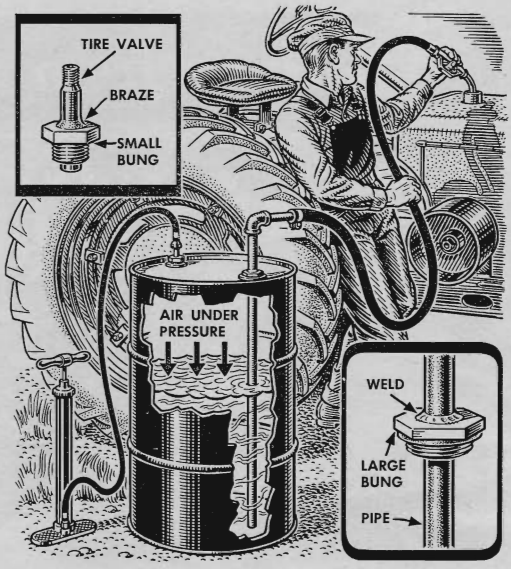
Lock Keeps Hood Up. If a counterbalanced hood tends to swing down, a C-shaped hook like this may be the easiest fix. Bend it from a piece of ⅛″ steel rod. Raise the hood a bit higher than it usually hangs to put the hook around the struts. The hook serves as a lock because the struts must move apart when the hood comes down.

Please turn the page for more auto hints.

MORE Hints from the Model Garage



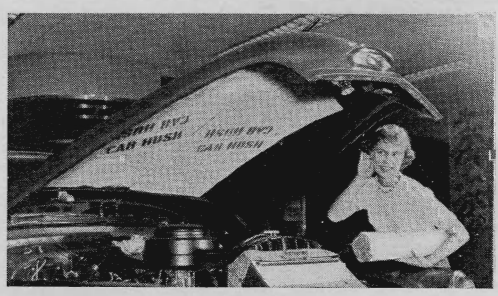
Keeping Coins Handy. A supply of change kept in this glove-compartment holder is handy for parking meters and toll bridges and highways. The coin holder came from a woman's purse. (Remember to lock the car when you park.)



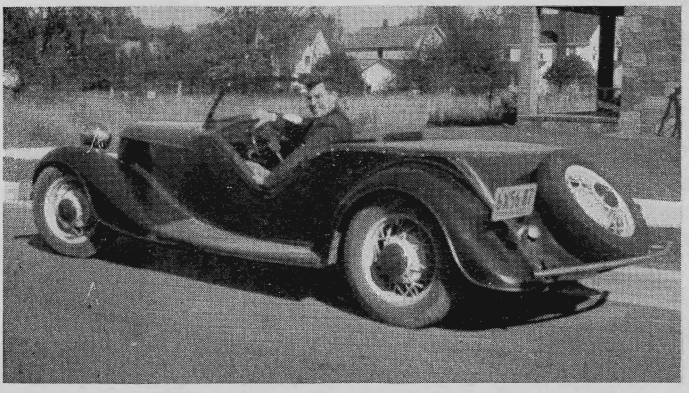
Air Pumps Fuel from Drum. It takes only simple equipment to pump gasoline from a 55-gallon drum. Give the tire pump a few strokes and the pressure will raise the fuel quite a distance. It's best to have a shut-off nozzle on the gas hose.

Glass Blanket Muffles Noise

ATTACHED under a car hood, a blanket of flexible glass fibers deadens engine noise and serves as a two-way heat insulator, keeping the engine warmer in winter and cooler under the hot summer sun. Marketed by P-J Industries of Milwaukee, the Car Hush blanket is applied with a special cement sold with it. The material is fireproof and is not affected by oil.

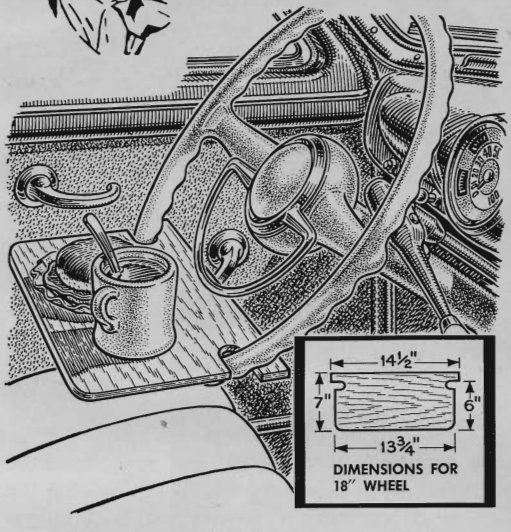


Eighteen-Year-Old Ford Is Reborn as Low-Slung Roadster



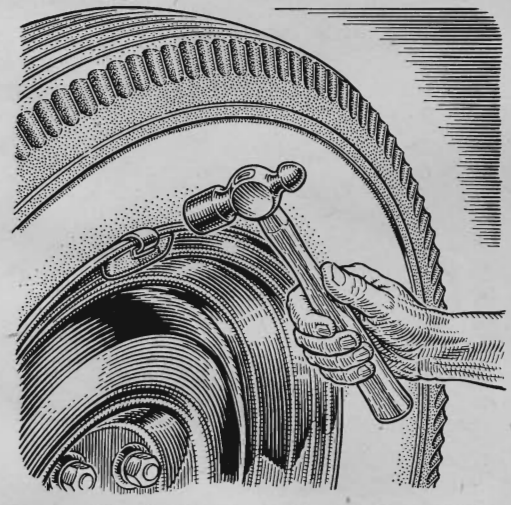
THIS slick job is the work of Carl Pierce, Cortland, N. Y. Basically a 1934 Ford coupe lowered to 8″ road clearance, it has a souped-up 1939 Ford engine. For more responsive steering, the pitman arm was lengthened so the wheel makes only two turns from lock to lock. Brakes are 1940 Ford hydraulic, instruments are from a 1936 Cadillac.

Hints from the Model Garage

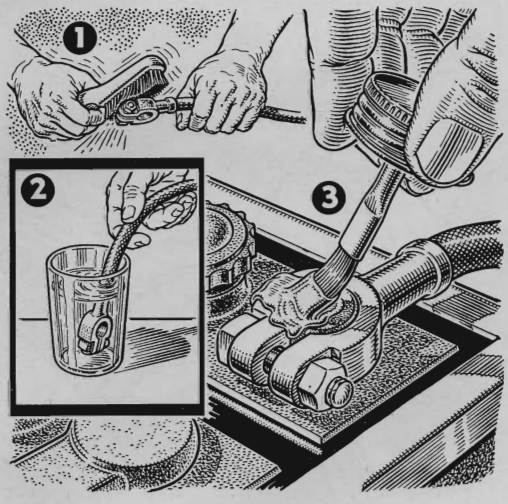


Lunch at the Wheel. For picnicking or eating at a drive-in, a tray like this will often be handy. Gravity and the protruding ears lock it to the wheel. For the other side of the car, the lowered glove-compartment lid makes a useful shelf.

Inner Tube Quiets Jack. A bumper jack won't rattle so much in the trunk if you store it this way. Raise the jack a few notches against an inner-tube rubber band. Cut a sleeve from a bicycle inner tube, pull it on the shaft, and slip in handle.



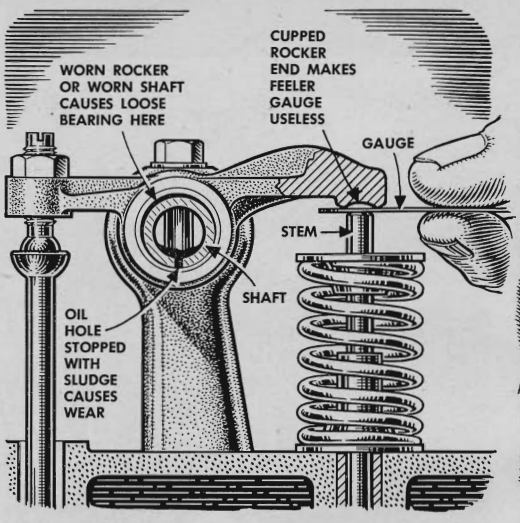
Seat Wheel Weights Carefully. When balancing a wheel, hold the weight in the correct position and give it one or two taps with a light hammer. Hitting too hard may crack the weight or tab. Centrifugal force at high speeds then will loosen it.



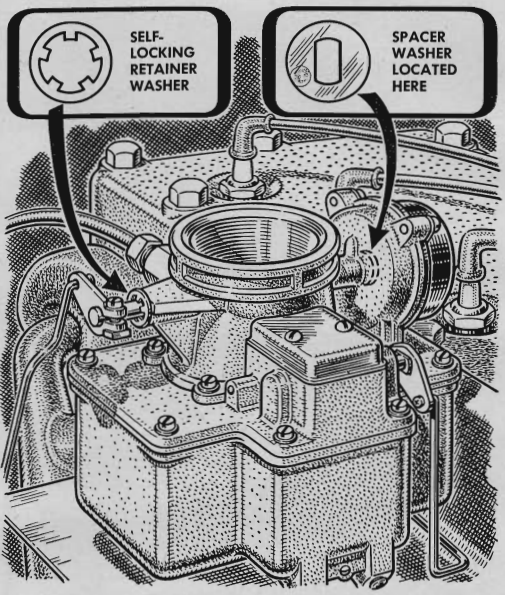
Rubber Cement Saves Battery. Irving J. Covert, Tarpon Springs, Fla., suggests this way to stop corrosion: wire-brush the clamps and terminals, dip them into or wipe on a baking-soda solution, and finally coat the terminal well with rubber cement.

Please turn the page for more auto hints.

MORE Hints from the Model Garage

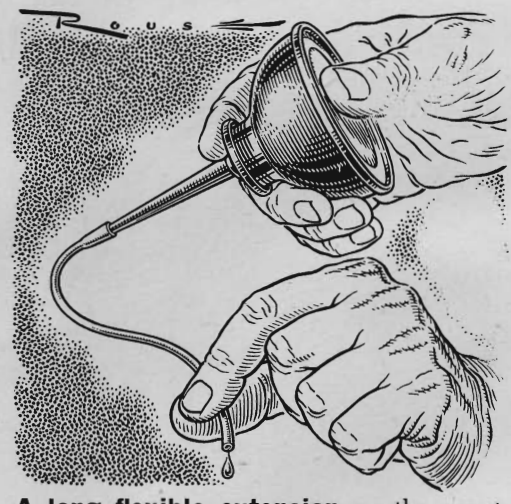

WORN ROCKER OR WORN SHAFT CAUSES LOOSE BEARING HERE
CUPPED ROCKER END MAKES FEELER GAUGE USELESS
GAUGE
STEM
SHAFT
OIL HOLE STOPPED WITH SLUDGE CAUSES WEAR

Things to look for in overcoming rough idle, noise or poor performance in an overhead-valve engine are suggested here. An oil-feed line plugged with sludge may cause wear of the rocker-arm bushing and shaft. Severe wear prevents accurate valve timing and proper clearances. The rocker-tip contact surface must be flat.



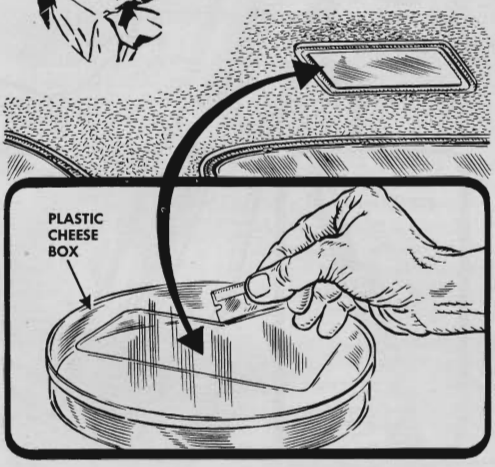
A buzzing carburetor can sometimes be traced to a vibrating choke valve. In the type of carburetor shown (with a spacer washer on the choke shaft), the noise can usually be stopped by seating the retainer washer tight against the air horn, but without causing binding. The lock washer must be placed with its prongs inclined outward.

Gauntlet work gloves stored in the car will keep dirt from your hands and sleeves when you must make roadside repairs in your Sunday clothes. Be sure to get the kind that is long enough to reach beyond your wrist and cover your sleeves.

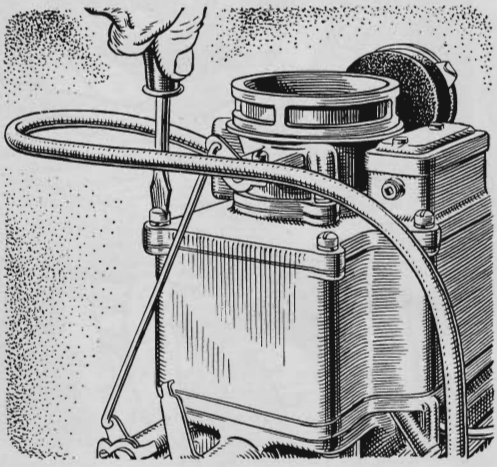


A long flexible extension on the spout of your oilcan will enable you to squirt oil into tight spots where the can itself wouldn't go. A length of model-airplane fuel line (neoprene) is just the right size and the oil won't damage it.

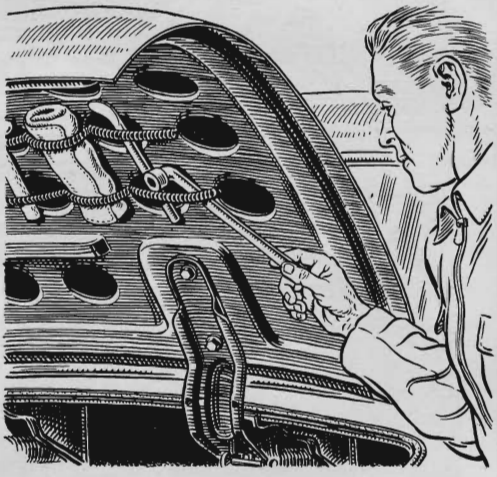
Hints from the Model Garage



A broken dome-light glass can be replaced easily and inexpensively by cutting the desired size from one of the plastic containers in which cheese and other products are sold. Give the disk a frosted appearance by sanding it lightly.



Stalling or rough idling may be caused by air sucked in around the gasket between air-horn assembly and float bowl or carburetor body. Tighten hold-down screws periodically, and also check on the nuts that hold the carburetor to manifold.

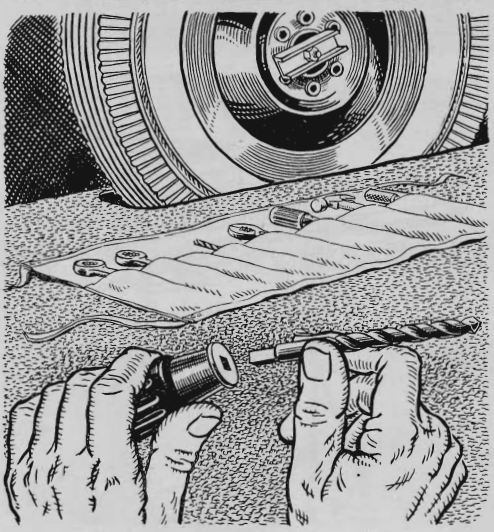


For a neater trunk, stretch a pair of door springs across the inside of the lid, hooking the ends into existing holes. You can then store miscellaneous equipment there—small tools wrapped in cleaning cloths, work gloves and so on. Wire the springs to the lid at intervals to provide compartments for specific items.

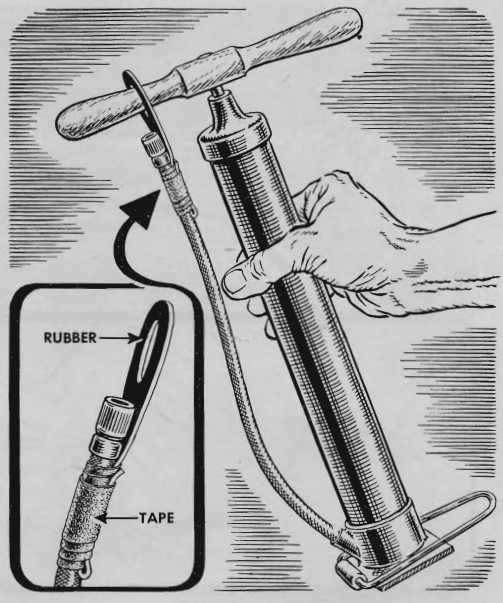
To stop vibration noise in a shift rod paralleling the steering column, try this trick. Belting from surplus army equipment is ideal, for it contains reinforced eyes every few inches. Run small bolts through these. Aluminum foil around the rod acts as a lubricant. The rubber allows a certain amount of give.

Please turn the page for more auto hints.

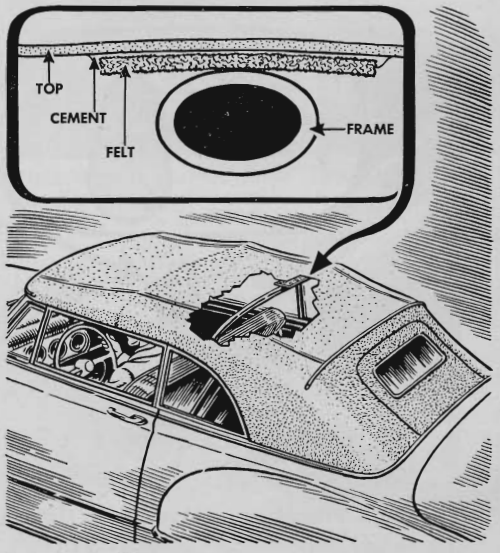
MORE Hints from the Model Garage



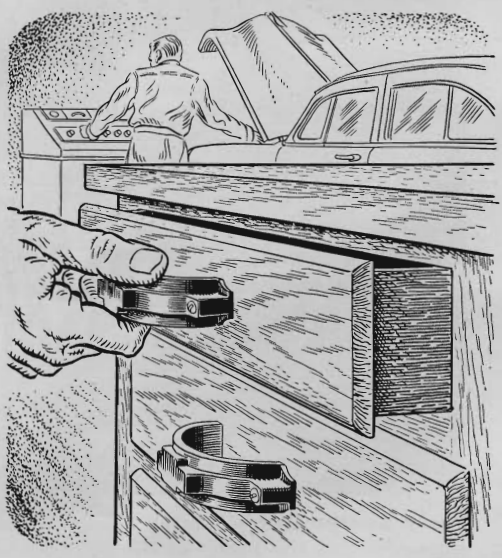
A twist drill is a worthwhile addition to a car tool kit if you consider a regular hand drill too bulky to carry. One idea is to grind the drill shank so that it can be used in the handle of a screwdriver that has a set of removable blades.



A piece of rubber attached to your tire pump like this will keep it a compact unit while stored with other gear in your car. The projecting rubber bends aside and doesn't interfere when you screw the air hose to the tire valve.

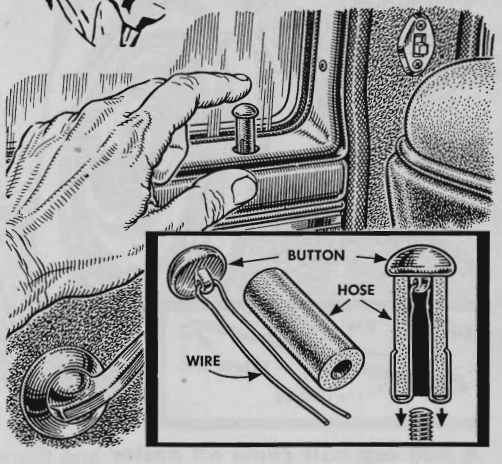


A convertible top often wears through at the points where the fabric slaps the frame cross members. A strip of felt or cloth attached under the top above these members will give the fabric longer life. Use rubber cement to attach the strips.

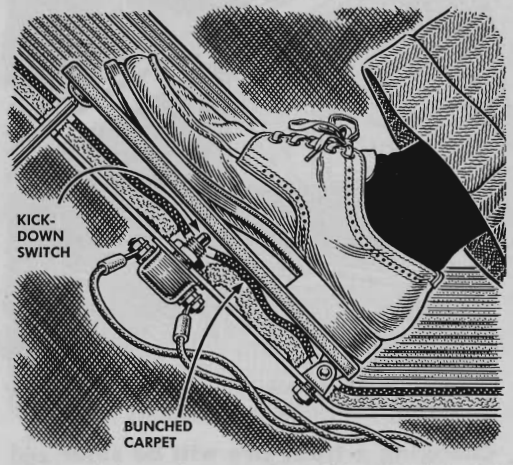


Discarded caps from the big ends of connecting rods can be put to use as drawer or cabinet-door pulls in a shop. Bolt or screw them in place. A garage that makes general repairs will usually have a lot of the caps around.

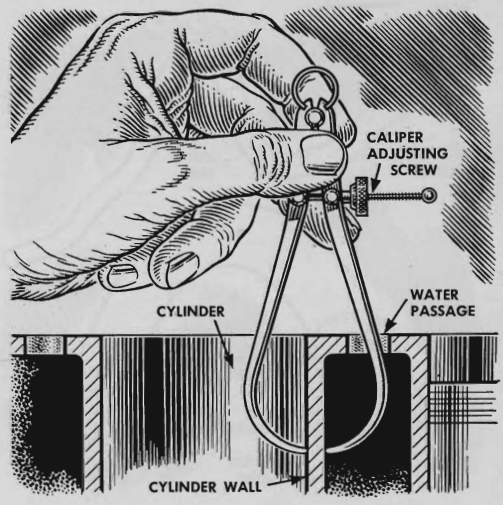
Hints from the Model Garage



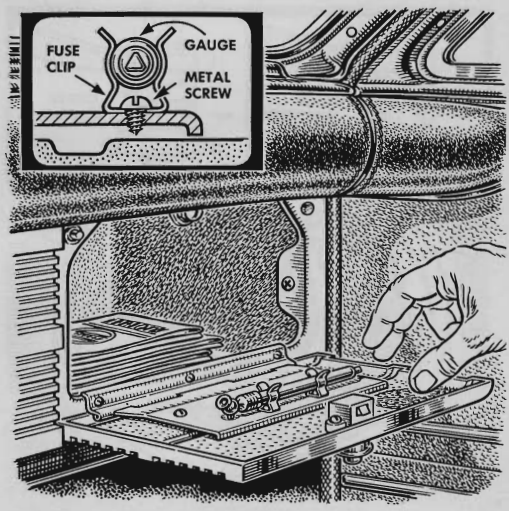
If a door-lock knob breaks and a factory replacement is not available, cut off a short piece of windshield-wiper hose. Loop a piece of copper bell wire through the eye of a dress button about the size of the original knob, push the wire through the hose, turn up the ends and force the assembly over the threaded control rod.



Carpet bunched under the accelerator may make it difficult or impossible to kick down an overdrive transmission from fourth to third to get maximum power. The owner of a car with an automatic transmission may have similar trouble because the pedal is set so low that it bottoms before operating the down-shift switch.



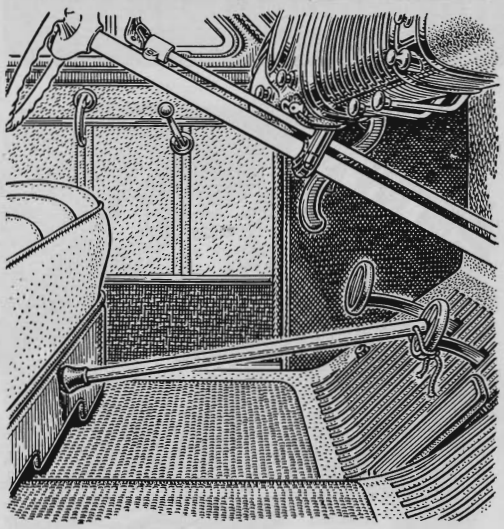
While reboring a cylinder, you can measure the wall with calipers. Put one prong through the water passage and turn up the calipers. Mark the screw setting with a fine pin, take out the calipers, reset the screw and measure between the points.



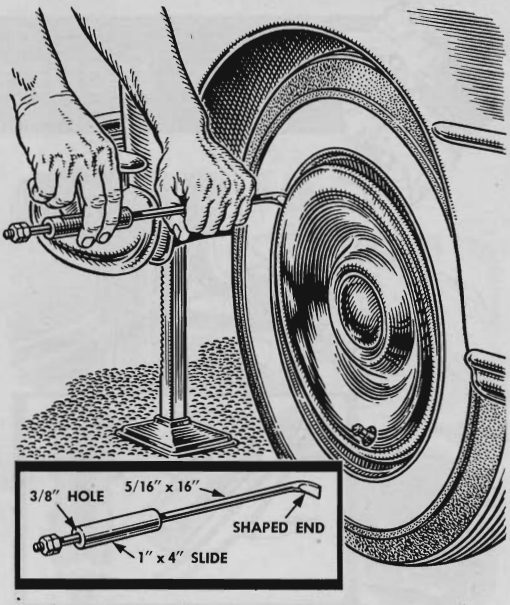
A tire gauge mounted on the inside of the glove-compartment door with a pair of fuse clips will not get lost among the odds and ends in the compartment. Spring clips suitable for the purpose usually cost only a nickel apiece. Fasten with screws.

Please turn the page for more auto hints.

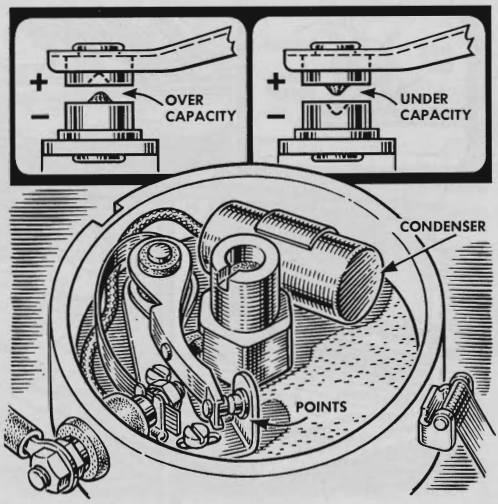
MORE Hints from the Model Garage



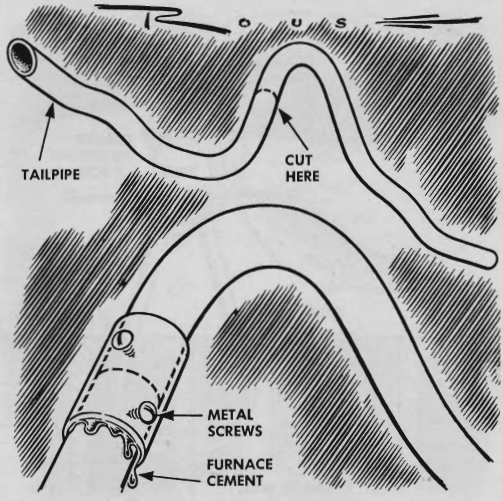
Changing a front tire will be safer and the wheel won't revolve if you first set the brakes with this broomstick arrangement. Cut the stick to the correct length, put a crutch tip on one end and loop cord through a hole in the other. While a front wheel is jacked up you then will have the safety of three locked wheels instead of only two.



A hub cap will come off easier and there will be less chance of marring the wheel paint if you make a tool like this and add it to your car kit. Ramming the slide against the nut while the hook is under the cap rim does the trick. The tool can also be used to remove front-wheel bearing caps that are pressed in place.

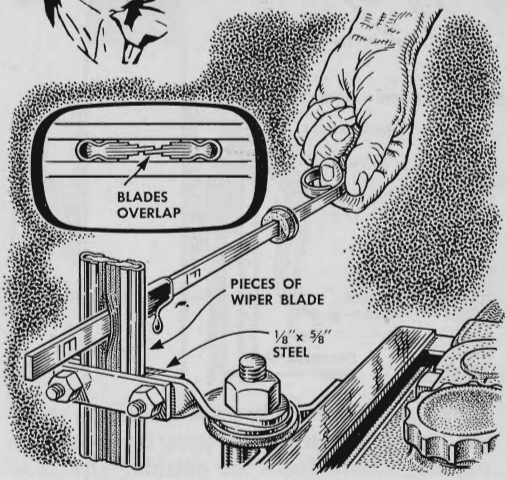


Pits in distributor points are a sign that the condenser is of the wrong value. If the positive point pits and the negative one builds up, the condenser is probably over capacity. If it's the other way, the condenser value is too low.

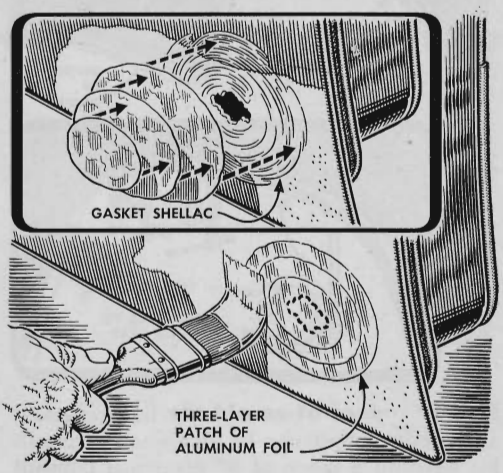


A tailpipe sometimes has so many twists and turns that putting a new one in place becomes a problem. If nothing else works, it may help to saw the pipe in two and later, after the parts are in place, join them with a metal sleeve and furnace cement.

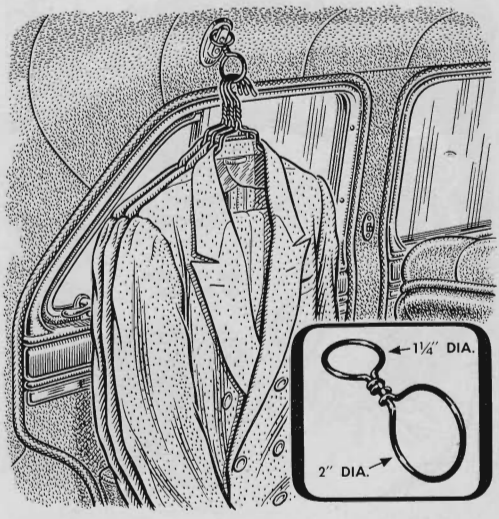
Hints from the Model Garage



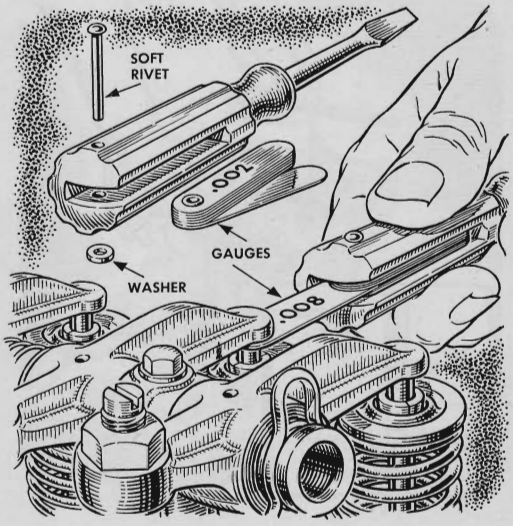
A dipstick cleaner can be made from two old windshield-wiper blades. Clamp them between two pieces of steel with the rubber slightly overlapping. Mount the assembly in any convenient spot under the hood where the dripping oil can fall free.



To patch a small hole in a car body, sand the metal smooth, apply gasket shellac, let it get tacky, and press down a piece of aluminum foil. Let cement harden, and cement on two successively smaller pieces. Sand edges of foil, paint patch to match.



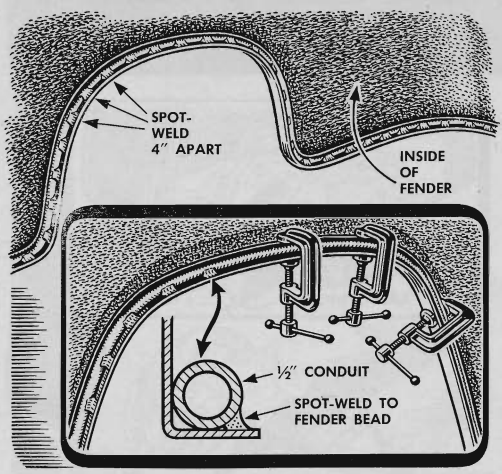
Double-looped wire formed like this will enable you to carry seven or eight coat hangers on the standard hook found in the rear of most cars. Cut wire from a hanger and form the loops by bending around a flashlight or broom handle.



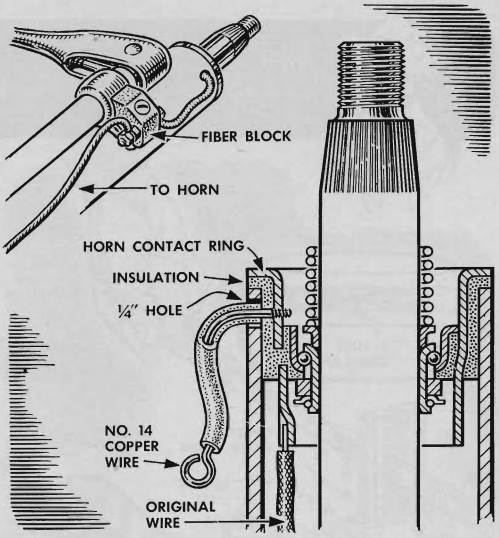
A feeler gauge and screwdriver are the tools you use most for setting rocker-arm clearances, so it's a help to combine the two. The gauge can be put into either a wood or plastic handle by carefully routing out a slot just big enough to take it.

Please turn the page for more auto hints.

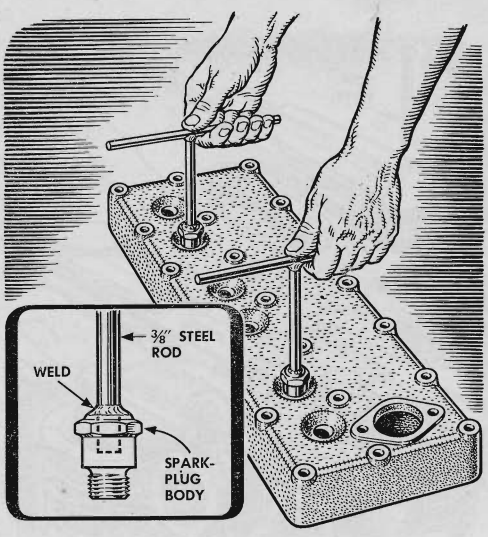
MORE Hints from the Model Garage



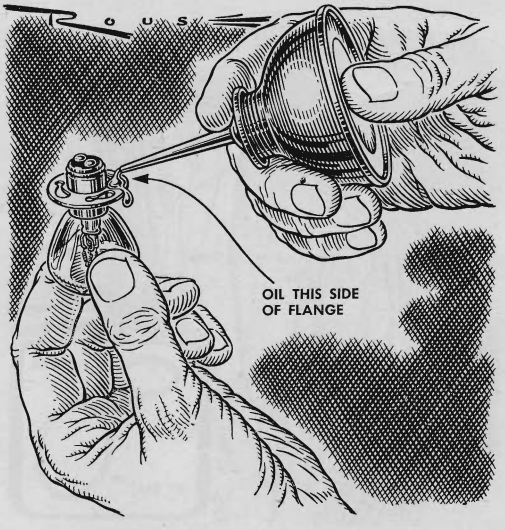
If the fenders of an old car have cracked at the edges, they can be given new strength by welding a piece of ½" electrical conduit inside the bead. The conduit will bend easily to the contour of the fender. Clamp it in place until the welding is finished. Keep the welds inside the bead to avoid damaging the finish of the car.



When a horn wire breaks inside the steering column, you can bypass the break by running a wire down the outside. Drill a ¼" hole in the column at the point shown. Then drill a No. 53 hole through the insulation and contact ring. Tap this for a threaded piece of No. 14 wire, insulate the wire, and connect to a junction block on the column.

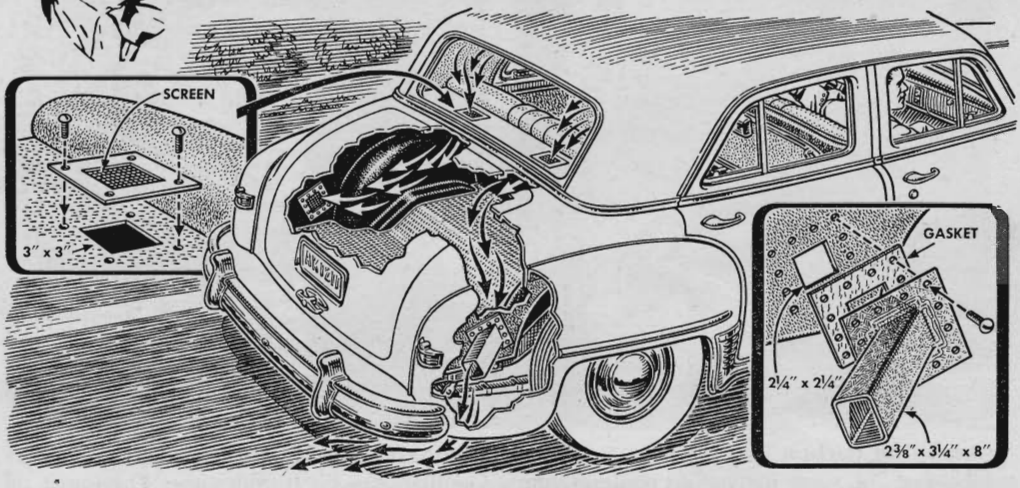


Lifting a cylinder head will be a lot easier if you make a couple of T-shaped handles like this. Knock the porcelain tops out of a pair of old spark plugs and weld them to handles made from ⅜" rod. To use, screw into the plug seats.



Apply light oil to the flange when you install a prefocused headlight bulb in an older car. This will make the bulb easier to remove when necessary. If corrosion should form, the bulb will not freeze fast to the socket assembly.

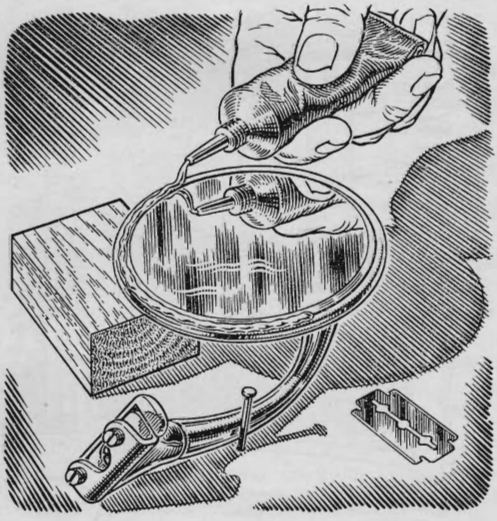
Hints from the Model Garage



Rear air outlets installed like this will often increase the effectiveness of a heating system that draws fresh air from outside, especially if the car is tightly sealed. The circulating air also will help keep the side and back windows free from fog, keep the trunk free from dampness and make it unnecessary to open windows.

Screens over the parcel-shelf openings prevent objects from falling through. The outlet can be a piece of square gutter pipe. Point it back to keep out mud and water.

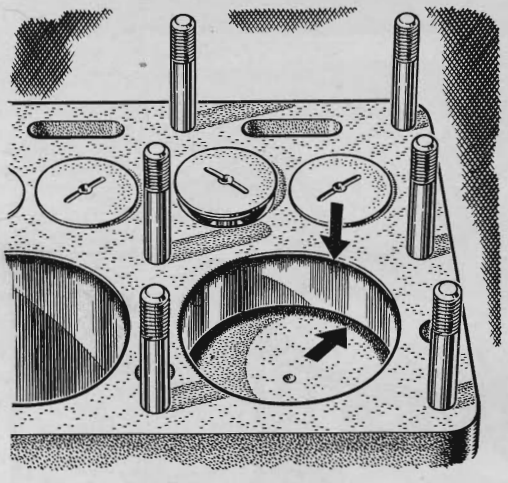
For work under a car, a gooseneck desk lamp is an excellent addition to a creeper. Drill the base of the lamp and screw it to the creeper. Invert the shade to throw light up. The flexible neck will keep the light in the desired position.



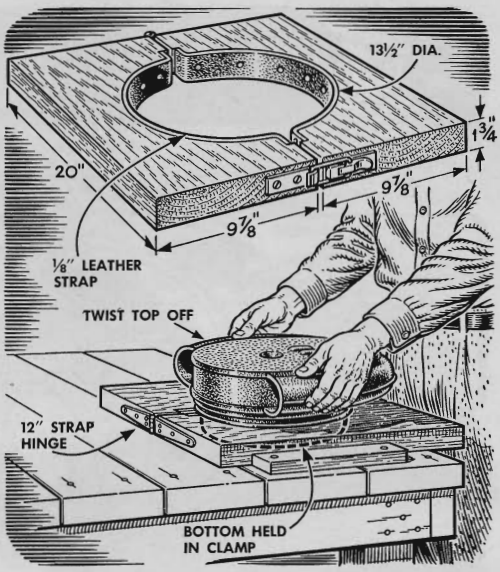
If a mirror rattles in its frame, transparent windshield-glass sealer or a clear cement applied between the glass and rolled edge will keep it quiet. Remove mirror and place it flat to do the job. Scrape off excess cement with a razor blade.

Please turn the page for more auto hints.

MORE Hints from the Model Garage

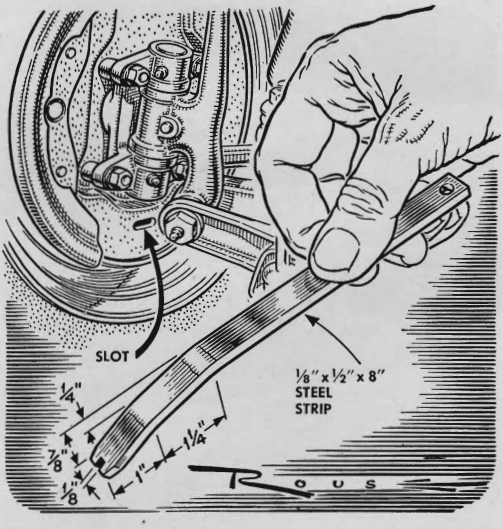


In scraping carbon from an engine during a top overhaul, some mechanics contend you can do too good a job. Their practice is to leave a ring about ⅛″ wide around the top edge of the piston and another ring around the bore just above piston travel. This, they say, will preserve the oil seal. Removing the carbon may make the car an oil hog.



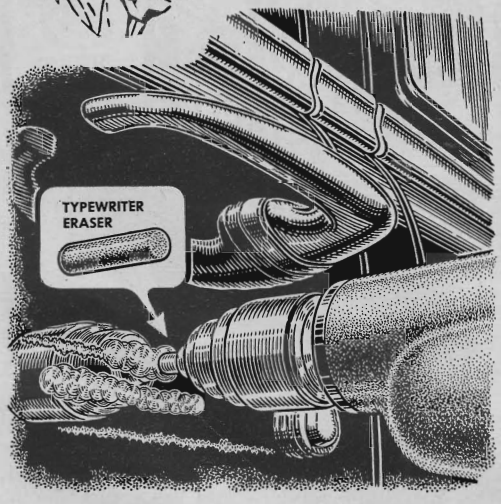
Removing the air-cleaner cover on a new Cadillac can be troublesome. Driving it off from underneath may deform the metal. This clamping device will do the job with ease. Remove the cleaner from the engine, clamp the bottom between the leather-lined jaws, and you can twist off the top without causing any damage to the metal.

Cold drafts can be kept out of a garage fitted with overhead doors by slitting a length of garden hose and nailing it to the bottom edge of the door. This will seal the opening even if the floor of the garage is uneven.



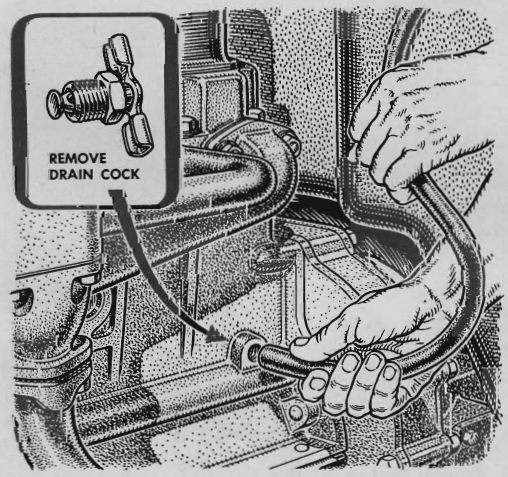
A wrench for adjusting brake shoes can be made from a piece of ⅛″ by ½″ by 8″ mild steel. File a ⅛″ slot in the end and bend to the shape shown above. Use by inserting it in the slot on the backing plate and prying around the notched wheel.

Hints from the Model Garage



Chucked in an electric drill, the gritty core of a pencil-type typewriter eraser makes it easy to touch up tiny rust spots on a car body without scratching the adjoining paint. The eraser will quickly remove the rust and clean the metal for painting.

A large baking pan kept in the trunk of your car is a neat container in which to place wet and muddy tire chains if you have to remove them along the road. Your wife may have an old battered pan that she would be willing to discard.

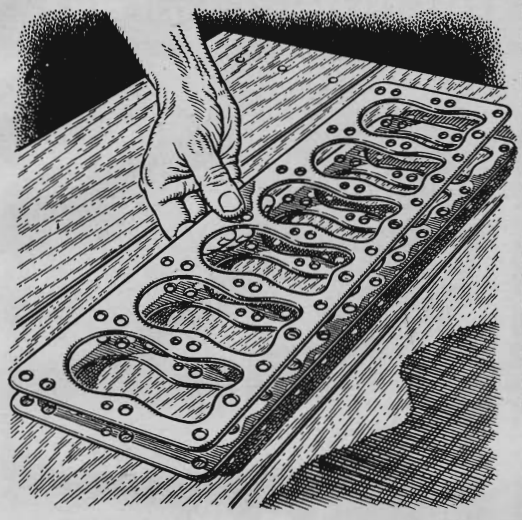


When draining coolant in cold weather, be sure a good stream runs freely from the block or you may have a costly freeze-up. If the water just dribbles out, remove the cock and use the blast from an air hose to loosen the sediment that can block drainage.

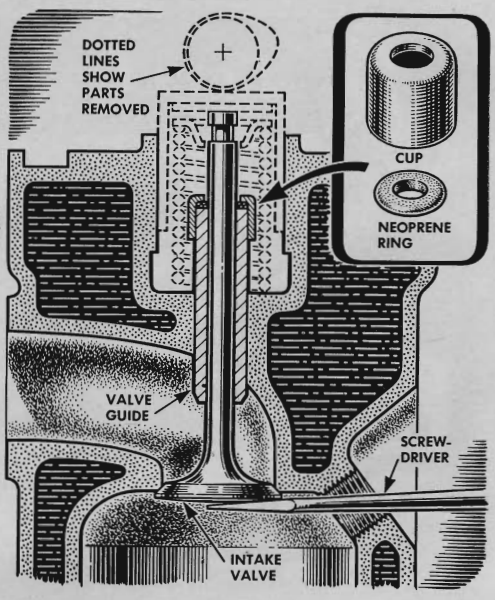
To pour antifreeze into the radiator from a large can, stand at the side of the car with the can extending into the engine compartment so that any dribbles get on the engine and not the body. The fluid won't hurt engine parts, but damages paint.

Please turn the page for more auto hints.

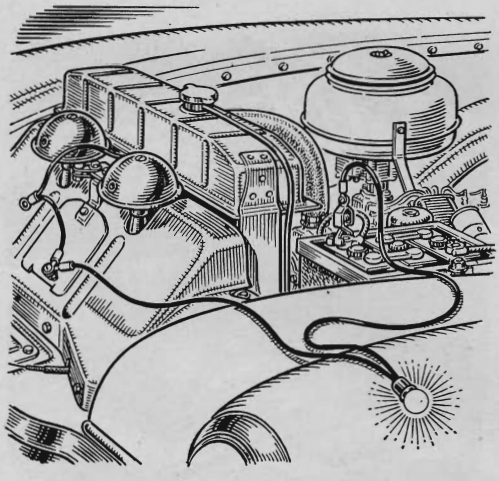
MORE Hints from the Model Garage



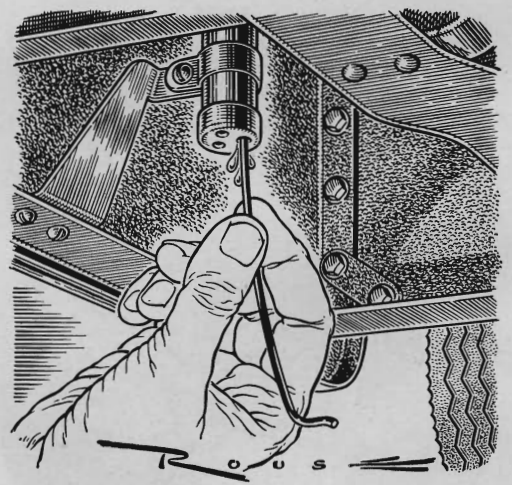
Check a new cylinder-head gasket before installing by matching it with the old one. If they are not identical, a vital water passage might be sealed off with disastrous results. Also, a black area on an old gasket indicates it has not been gastight. So be sure to tighten the head nuts according to specifications.



Oil consumption can be cut in a Crosley engine that has a cast-iron cylinder block by installing intake-valve seals just developed by the company. By removing the parts indicated, you can slip the neoprene sealing ring and steel retaining cup down against the guide. A screwdriver through the spark-plug hole will hold the valve up.

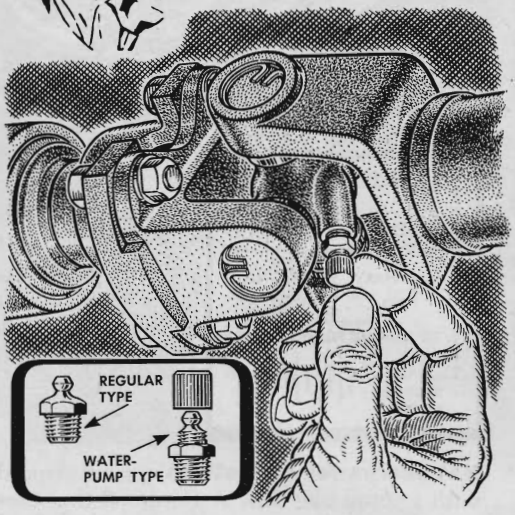


In repairing horn wiring, you can avoid the annoyance of frequent test blasts if you disconnect the wire leading to the horns and connect a test lamp to it and the battery. Use long leads to place the test lamp where it can be seen easily.

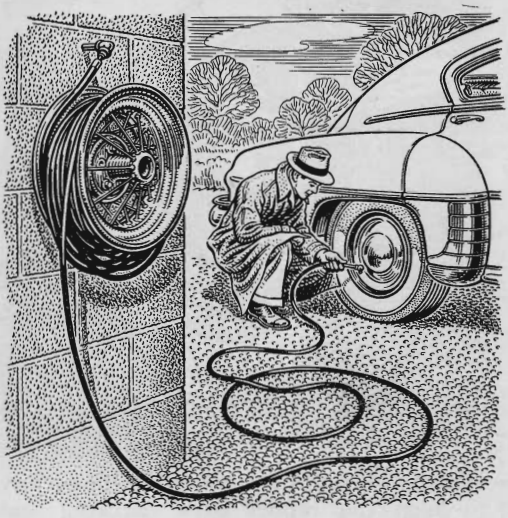


Drain holes in the base of a whip antenna sometimes get plugged with dirt, letting water accumulate in the tube. Poking a stiff wire through the holes will release the water and prevent possible interference with the operation of the radio.

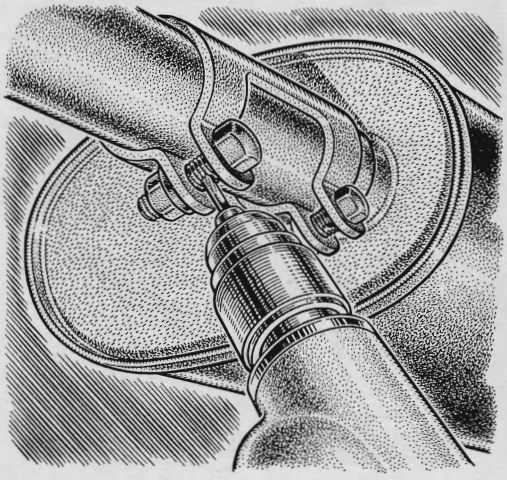
Hints from the Model Garage



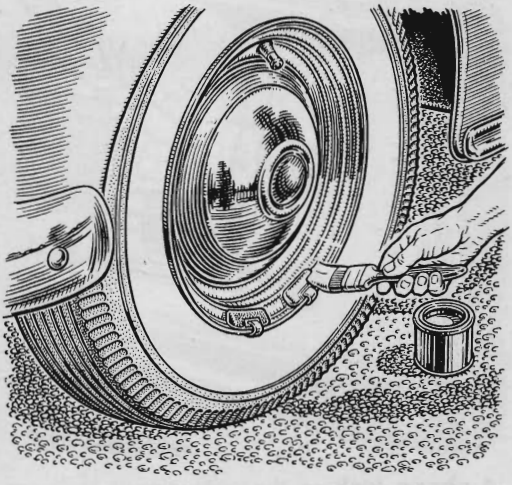
Grease fittings with caps are a worthwhile investment in under-car locations. Unless ordinary fittings are carefully wiped during a lube job, the gun may force specks of dirt inside, plugging the fittings or damaging the parts being greased.



An air-hose hanger for the service station can be quickly made from an old car wheel. Bolt it to the side of the building at waist height. This will keep the hose off the ground and make it easy to unwrap and replace after use.



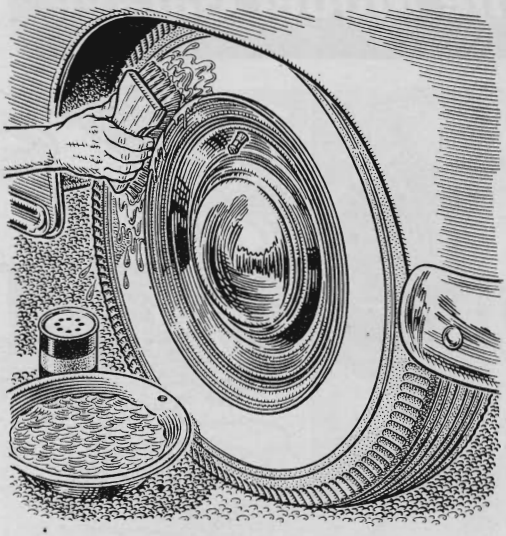
If you can't loosen a bolt holding a muffler or hose clamp and there is no space to use a hacksaw or chisel, try this: Drill a small hole through the side of the bolt and follow it with a bigger drill. Then twist the bolt off.



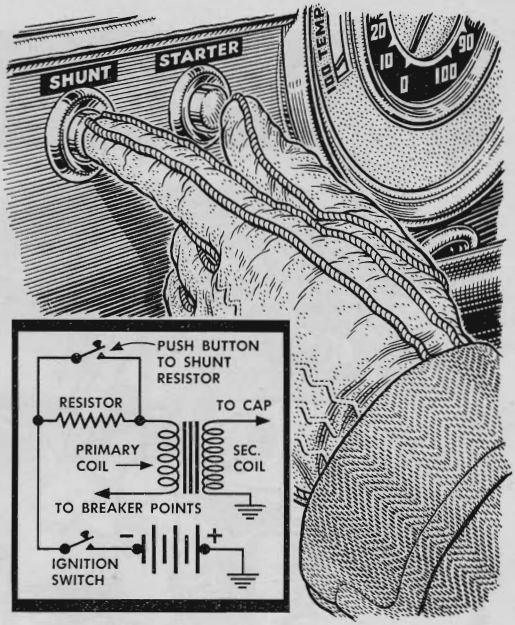
After your wheels are balanced, they'll look better if you paint the balancing weights the same color as the wheels. A small can of matching touch-up paint will do the job quickly. At the same time, touch up any marks or scratches on the wheels, too.

Please turn the page for more auto hints.

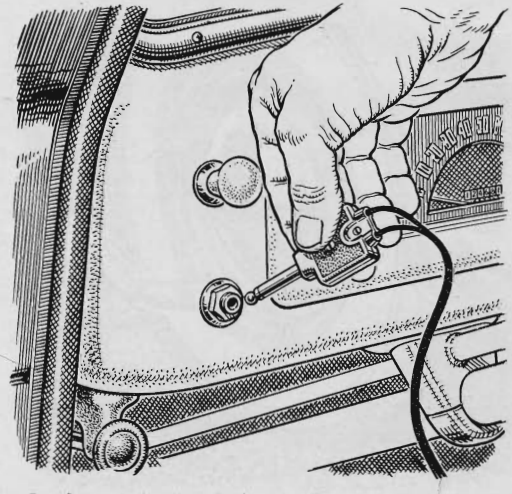
MORE Hints from the Model Garage



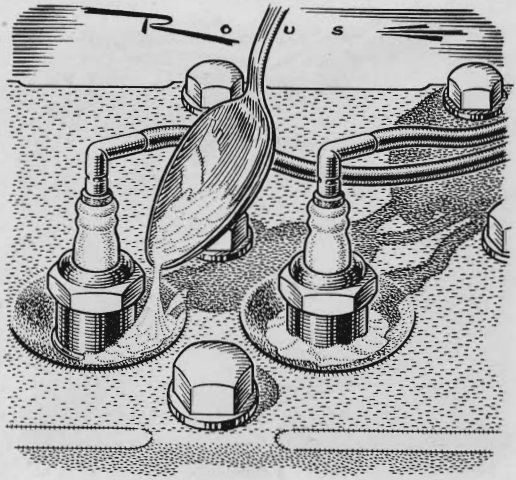
White sidewalls are waxed in the factory to keep the rubber from checking and cracking. Under a hot sun, excess wax may bleed to the surface of a new tire, a condition known as wax bloom. This excess wax should be removed with water, scouring powder and an ordinary scrubbing brush to prevent discoloration of the tire.



Hot sparks for cold starts can be assured with a setup like this. A Ford coil that uses a resistor in the primary lead is substituted for the regular coil. A normally off push-button switch on the dash is depressed at the same time you hit the starter. This by-passes the resistor, giving higher voltage at the coil input.

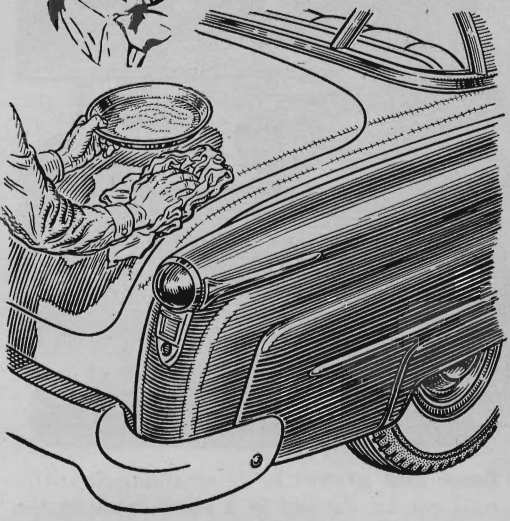


A phone jack of the open-circuit type on the instrument panel makes it easy to connect a home battery charger. Ground one side of the jack and hook the other to the ammeter. Be sure to polarize the charger leads when you connect them to the plug.

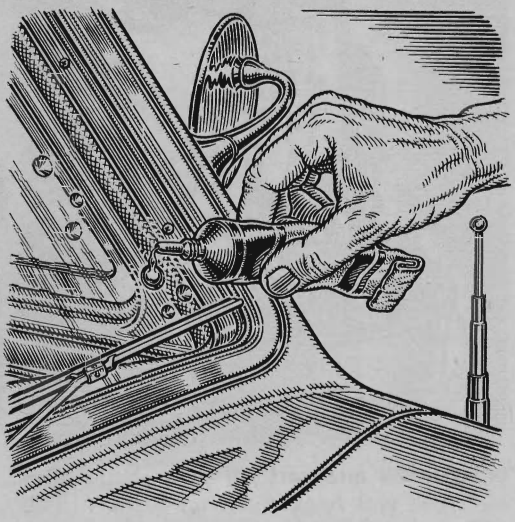


Compression leaks around spark plugs can be easily located by sprinkling a liberal amount of talcum powder in the wells and noting any powder disturbance when the engine is started. To eliminate leaks you find, tighten the plugs or replace the gaskets.

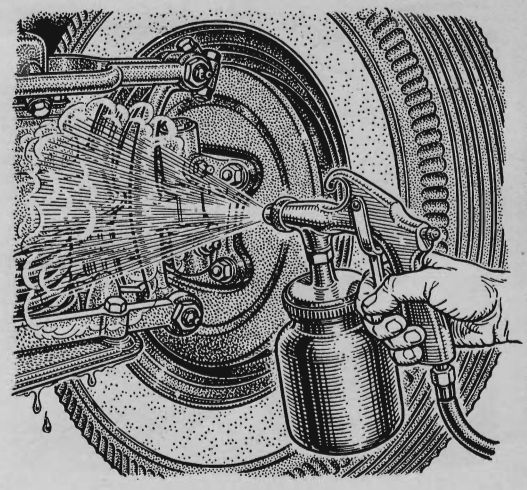
Hints from the Model Garage



After wax has been applied to a car and is ready to be rubbed down, you'll get a rave job if you dip the wiping cloth lightly in a pan of flour. The surface will brighten up with far less work with the polishing cloth.



Holes in windshields caused by stones or BBs are often conical ones with the small end on the outer side. To keep moisture from discoloring the safety glass, wash the hole with household ammonia, let it dry and apply transparent cement to both sides.



Grease can be cleaned off such parts as the front suspension, transmission or differential by using a paint sprayer to spray on kerosene. Allow the kerosene to soak in for a few minutes and then turn a water hose on the area full force.

When his car began to burn oil, one owner lettered this legend on the underside of the filler-cap door. His car is driven by several persons, and the sign lessens the chance that someone will neglect to have the oil checked at each gas stop.

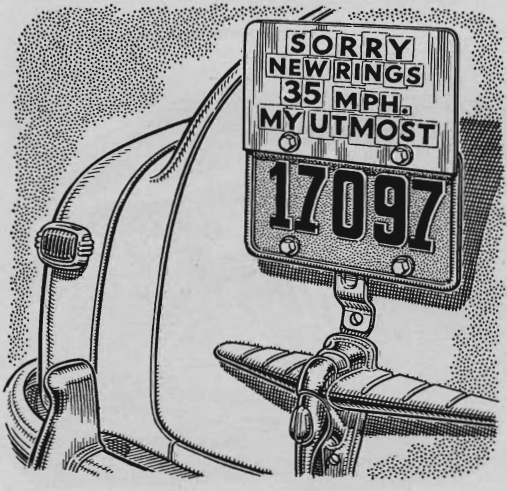
Please turn the page for more auto hints.

MORE Hints from the Model Garage

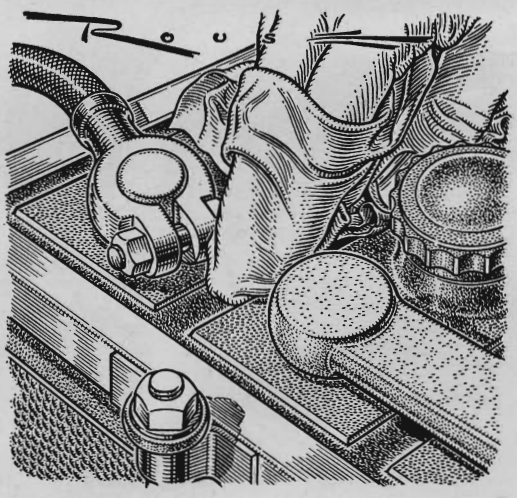
Wash mud and salt off your chains after each use and hang them up to dry. This will make them last longer. Even with proper drying the steel may rust some, but light rusting will not affect chain strength.

When one cross chain breaks, it is advisable to replace them all. If one has broken, others will probably soon go.

Sand and gravel or other different materials can be carried in a small truck at the same time without mixing if you divide the body like this. Install matching pieces of channel iron on opposite sides of the body. Cut division boards to slip into the channels. It may help to space each division to hold one cubic yard of material.



To avoid toots and angry glances after a ring job, one car owner bolted this sign to the rear of his car. He made the sign by cutting letters from a newspaper and cementing them to a piece of tin about the size of his license plate.



Wipe off dirt and moisture from the top of your battery occasionally. If too much piles up, it will form a leakage path between the terminals. Another tip: clean out the small vent holes in the plugs with fine wire from time to time.